

AMENDMENTS TO THE CLAIMS

Claims 1-20 (cancelled)

Claim 21. (new) A method for implanting a balloon expandable stent at a site within a passageway of a curved coronary artery; comprising the steps of:

utilizing a stent having a first pre-deployment diameter and a second deployed diameter, the stent in its first diameter comprising at least two longitudinally spaced apart circumferential rings having closed ends, each of the circumferential rings having at least two peak segments and at least two valley segments, adjacent rings being connected together by at least one longitudinally extending connector having a first end portion fixedly connected to a first of the circumferential rings and a second end portion fixedly connected to an adjacent circumferential ring, the connector having at least one circumferentially extending turn back portion between its first and second end portions that can expand or contract in length while being passed through a curved passageway as measured by the straight line distance between its first and second end portions;

disposing the stent upon a stent delivery catheter having an inflatable balloon;

inserting the stent delivery catheter and the stent within the curved passageway by percutaneous catheterization;

delivering the stent delivery catheter and the stent through the curved passageway to the site of implantation with the connector member expanding or contracting in length as measured by the straight distance between its first and second ends to facilitate delivery and placement of the stent; and

expanding the stent to its deployed second diameter at the site of implantation by inflating the balloon of the stent delivery catheter to force the stent radially outward against the wall of the coronary artery.

Claim 22. (new) The method of claim 21, wherein a straight line drawn from the first end portion of the connector to the second end portion of the connector is substantially parallel to a longitudinal axis of the stent.

Claim 23. (new) The method of claim 21, wherein at least three circumferentially spaced connectors connect the first of the circumferential rings and a circumferential ring adjacent to the first circumferential ring.

Claim 24. (new) The method of claim 21, wherein the connector has at least two turn back portions between its first and second end portions.

Claim 25. (new) The method of claim 21 wherein at least one of the first and second end portions of the connector includes a straight segment that is substantially parallel to the longitudinal axis of the stent.

Claim 26. (new) The method of claim 25, wherein each of the first and second end portions of the connector includes a straight segment and a straight line drawn through the straight segments is substantially parallel to the longitudinal axis of the stent.

Claim 27. (new) The method of claim 21, wherein the connector has at least two interconnected turn back portions between the first and second end portions, and each of the first and second end portions of the connector includes a straight segment and a straight line drawn through the straight segments is substantially parallel to a longitudinal axis of the stent.

Claim 28. (new) The method of claim 21, wherein the first end portion of at least one of the connectors is connected to a peak segment of one circumferential ring and the second end portion of the connector is connected to a valley portion of an adjacent circumferential ring.

Claim 29. (new) The method of claim 28, wherein at least one turn back portion of the connector is located entirely within a valley portion of a circumferential ring.

Claim 30. (new) The method of claim 21, wherein at least one of the circumferential rings is formed integral with at least one of the connectors.

Claim 31. (new) The method of claim 21, wherein the stent is formed as an integral structure from a single piece of metal.

Claim 32. (new) The method of claim 21, wherein the stent is formed as an integral structure from a pre-existing metal tube.

Claim 33. (new) The method of claim 21, wherein the turn back portion of the connector includes at least one generally U-shaped segment.

Claim 34. (new) The method of claim 33, wherein the turn back portion of the connector includes at least two generally U-shaped segments that open in opposite directions.

35. (new) The method of claim 34, wherein at least two of the generally U-shaped segments are positioned adjacent to one another, each of the generally U-shaped segments include a pair of spaced apart legs joined by an arcuate section, and one of the legs of one of the U-shaped segments is coextensive with one of the legs of the other U-shaped segment.